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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/833,846

Applicant(s)

KUBAITIS, EDWARD CLIFFORD

Examiner

Cam Y T. Truong

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant has amended claims 7, 11, 13, 16, 17, 20, 25 in amendment filed on 10/10/2007.

Claims 1-38 and 41-43 are pending in this Office Action.

Response to Arguments

2. Applicant's arguments filed 10/10/2007 have been fully considered but they are not persuasive.

- a. Applicant argued that Bates does not teach "providing extracted data... in a data log directly to a user".

In response to application's argument, Examiner respectfully disagrees because Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55). Result cache is represented as data log.

- b. Applicant argued that Madnick teaches away from "document centric". There is no suggestion or motivation to make the proposed modification, including that which has been presented in the Office Action. Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply lizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing easily (lizuka, col. 4, lines 45-55).

c. Applicant argued that Madnick cannot be properly combined with Bates to render obvious the claimed limitation and the rejection based thereon should be withdrawn.

The examiner respectfully submits that to establish a prima facie case of obviousness under 35 USC 103, references must provide motivation or suggestion

either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art; must be analogous; and must teach all the claimed limitations.

The instance application is related to a method for extracting data from a network.

Madnick is related to a method for extracting data from a network (abstract).

Similarly, lizuka is related to a method for extracting data from a network (fig. 5).

Bates is related to a method for extracting data from a network (figs. 1&10).

Importantly, lizuka teaches the user interface unit receives a search request (query statement) consisting of search items and search condition as one fundamental clause (col. 13, lines 35-40). Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55).

As discussed above, a person of an ordinary skill in the art at the time the invention was made would recognize the advantages of lizuka and Bates to apply lizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time to design, to retrieve data contained in a plurality of semi-structured documents over pen networks quickly and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of

semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing easily (Iizuka, col. 4, lines 45-55).

Thus, rejection for claim 1 is established a case of prima facie obviousness properly.

d. Applicant argued that motivation for combining the references as "...in order to retrieve a relevant information corresponding to a user's request correctly and quickly". Thus, applicant respectfully submits that this motivation does not suffice to establish a case of prima facie obviousness as is necessary for a rejection under 103 for claim 4.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Hennings' s teaching of following the links until the Caribbean.htm is

reached to Madnick's system in order to retrieve a relevant information corresponding to a user's request correctly and quickly and further provide a system and related method for adding contextual information pertaining to one or more linked documents, to display pages that contain hyperlinks to the linked documents (Henning col. 7, lines 40-45).

e. Applicant argued that Madnick does not teach a "web crawler". Examiner respectfully disagrees because Madnick teaches the wrapper generator 614 as web crawler for searching web pages (col. 13, lines 20-35). In addition, Bates teaches search engine for search web pages (col. 10, lines 5-20). Iizuka teaches search engine for searching web pages (figs. 2 & 9).

f. Applicant argued that Madnick does not teach "web domain address further comprises at least one link address". Examiner respectfully disagrees.

In response to applicant's argument, Madnick teaches the web domain address such as <http://quotes.galt.com> has cgi-bin/stockclnt as on link address (table 2, col. 12).

g. Applicant argued that the combination of Madnick in view of Bates and Iizuka does not teach claim 26 "wherein the web domain address further comprises a link address, wherein at least another portion of data is located with the link address". Examiner respectfully disagrees.

Madnick teaches the web domain address such as <http://quotes.galt.com> has cgi-bin/stockclnt as on link address (table 2, col. 12). Stock is represented as another portion of data located with cgi-bin/stockclnt (col. 15, lines 1-10).

h. Applicant argued that no modification statement is provided in the office action. Since no modification statement is provided in involves the reference of Bates, it is respectfully submitted that the present rejection of claim 1 does not establish case of prima facie obviousness with regards to claim 34.

The examiner respectfully submits that to establish a prima facie case of obviousness under 35 USC 103, references must provide motivation or suggestion either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art; must be analogous; and must teach all the claimed limitations.

The instance application is related to a method for extracting data from a network.

Madnick is related to a method for extracting data from a network (abstract).

Similarly, lizuka is related to a method for extracting data from a network (fig. 5). Bates is related to a method for extracting data from a network (figs. 1&10). Importantly, lizuka teaches the user interface unit receives a search request (query statement) consisting of search items and search condition as one fundamental clause (col. 13, lines 35-40). Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55).

As discussed above, a person of an ordinary skill in the art at the time the invention was made would recognize the advantages of Iizuka and Bates to apply Iizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time to design, to retrieve data contained in a plurality of semi-structured documents over open networks quickly and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing easily (Iizuka, col. 4, lines 45-55).

Thus, rejection of claims 1 and 34 is established properly.

i. Applicant argued that none cited art teaches claim 4 "following links contained within the web domain until the links have been exhausted or following the links until a predetermined limit is reached". Examiner respectfully disagrees

In response, Hennings teaches following the links until the Caribbean.htm is reached. Caribbean.html is represented as a predetermined limit (figs. 2, 4, 8). Thus, a prima facie case of obviousness has been established properly for claim 36.

j. Applicant argued that Henning does not teach "parsing". Examiner respectfully disagrees because Henning teaches data is parsed in many portion as shown in fig. 4.

k. Applicant argued that nor of cited references teach "reducing the retrieved data to a region of interest" in claim 8.

Jammes teaches the claimed limitation "reducing the retrieved content to a region of interest" as an HTML coded result set: web/sedans.html>Sedans </A. This information shows the system reduced the retrieved content to a region of interest as Sedans (col. 22, lines 22-45).

l. Applicant argued that cited references do not teach "parsing the database-structured query to determine at least one link to search at the website" in claim 28. Examiner respectfully disagrees.

Madnick teaches a query is broken into multiple sub-queries, some of which access traditional databases, some of which access relational database (col. 15, lines 25-30).

m. Applicant argued that lizuka is not clearly stated as being relied upon to reject claim 31.

In response to applicant's argument, there was a typo error. In fact, as to claim 31, Madnick teaches the claimed limitation "wherein extracting data based in part on at least one of an Hypertext Markup Language (HTML) table, a binary file, and a matching pattern" as a matching pattern (col. 15, lines 1-10).

n. Applicant argued that Henning and Madnick does not teach " extracting at least another portion of the data at the at least one other web site based on the database-structured query and the provided web domain address, wherein the at least one other website include a non-database structured arrangement of data that is processed as a searchable database" in claim 29. Thus, a prima facie case of obviousness has not been established. Examiner respectfully disagrees.

Madnick teaches extracting data many web sites based on query and web domain address and flat files contain non-database structured arrangement of data that processed as a searchable database.

Henning teaches extracting another portion of data as golfing data for displaying to a user as shown in fig. 8.

Thus, it would have been obvious to a person of an ordinary in the art at the time the invention was made to apply Hennings's teaching of extracting Golfing data at a second web page to Madnick's system in order to retrieve data contained in a plurality of semi-structured documents over a network.

As discussed above, a prima facie case of obviousness for claim 29 is established.

o. Applicant argued that binary file listed in Ecke is not a form of "extracted data". Thus, a prima facie case of obviousness has not been established for claim 43.

Examiner respectfully disagrees.

In response to applicant argument, Madnick does not explicitly teach the claimed limitation "wherein the extracted data includes at least one binary file". However, Madnick teaches extracted data (col. 2, lines 55-60). This extracted data does not include "binary file"

Eckes teaches loading binary file (col. 2, lines 40-45).

It would have been obvious to a person of an ordinary skill in the art at the time invention was made to apply Eckes's teaching of downloading binary file to Madnick's system in order to allow faster retrievals and reduced resource consumption.

As discussed above, the combination of Ecke and Madnick teach the limitation of claim 43.

p. Applicant argued that non off cited references teaches the amended claims 7, 12, 13, 16, 20, 25.

In response to applicant 's argument, Examiner addressed this claimed limitation in the below office.

q. Applicant argued that none of cited art teach "providing extracted data from the web domain address in a tab delimited file directly to the user".

In response to applicant's argument, Madnick teaches returning extracted data from address in source not in flat files indirectly to the user (col. 9, lines 49-63, col. 2, lines 25-40; col. 15, lines 65-67, fig. 6).

For the above reasons, the cited references teach the claimed invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 3, 5, 6, 10, 17-24, 26, 34, 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick in view of Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982).

As to claim 1, Madnick teaches a method for extracting data from a network by a server (col. 3, lines 1-7; col. 1-2);

"enabling a database-structured query with at least one fundamental clause to be generated by a user" as the request translator receives a data request from data receiver 102. The request is made by an SQL-query language application. The

request translator separate a query into several sub-queries for retrieving data from relational database and other sources . Clearly, the request, which is made by a user 102 by using the SQL -language application, is a database-structured query. The request does not explicitly contain at least one fundamental clause (figs. 2&6, col. 5, lines 15-17; col. 15, lines 25-30; col. 2, lines 45-50);

“determining a web domain address on the network from which to extract the data” as determining a URL on the network to extract the data (table 2, col. 12, lines 1-10, lines 1-5);

“extracting the data from the web domain address directly by retrieving a non-database structured arrangement of data from the determined web domain address and performing the database-structured query upon the retrieved non-database structured arrangement of data” as at least a portion of the query is converted into one or more commands which can be used to interact with a semi-structured data source. Those commands are issued and data is extracted from the data source. In this case a source is located at an address or URL. The above information shows that the data is extracted from a semi-structured data source based on the address of the source and the command (fig. 7, col. 10, lines 25-32; col. 2, lines 2-8);

“providing extracted data from the determined web domain address in a data log directly to the user” as returning extracted data from address in source not in data log indirectly to the user (col. 9, lines 49-63, fig. 6).

Madnick does not explicitly teach the claimed limitation “with at least one fundamental clause; in data log directly to the user”.

lizuka teaches the user interface unit receives a search request (query statement) consisting of search items and search condition as one fundamental clause (col. 13, lines 35-40).

Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply lizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing (lizuka, col. 4, lines 45-55).

As to claim 2, Madnick teaches the claimed limitation "wherein creating the database-structured query further comprises, including a network address within the

database-structured query indicating a starting point” as creating a command after converting at least a portion of a query, the command includes a network address as URL: <http://quotes.galt.com/>. This URL is indicated as a starting point (Table 2, col. 7, lines 25-32; col. 2, lines 5-10).

As to claim 3, Madnick teaches the claimed limitation “wherein the determined web domain address, includes at least one universal resource locator (URL)” as the URL (col. 12, lines 5-10, table 2).

As to claim 5, Madnick teaches the claimed limitation “wherein creating the database-structured query, further comprises, creating a regular expression within the database-structured query used to determine the data to extract” creating regular expression with a specification file 706 as a command to determine the data to extract (col. 10, lines 2-5; col. 12, lines 5-10, table 2).

As to claim 6, Madnick teaches the claimed limitation “wherein directly extracting data from the web domain, further comprises, matching a plurality of patterns contained within the regular expression to the retrieved data to determine the data to extract” as each variable to be retrieved in a given state, the state description contains a pattern to be matched against the document or semi-structured data source. The above information shows that matching each pattern of each variable contained with the regular expression (col. 15, lines 1-10).

As to claim 10, Madnick teaches the claimed limitation “reshaping at least a portion of the extracted data for use by at least one data analysis software program” as extracted data is translated by the data translator from the data context of the data source into the data context associated with the initial request. It means that the extracted data is reshaped by translating. The above information shows that the system has included a data analysis software program to translate the extracted data (col. 3, lines 6-8).

As to claim 17, Madnick teaches the claimed limitations:

“a client computer system having a client network connection to the network and communicating with a server computer system” as (col. 3, lines 60-67; col. 4, lines 1-5);

“the server computer system having a server network connection to the network and communicating with the client computer system” as (col. 3, lines 60-67; col. 4, lines 1-5), “the server computer system further configured to perform actions, comprising:

receiving the database-structured query from the client computer system as the request translator receives a data request from data receiver 102 and translates the data request into a query. The converter query converts at least a portion of the query into a command to interact with a semi-structured data sources such as HTML documents, flat files containing data that are not arranged as a relational database. The above information shows that a command is created based on the data request. The

data request from data receiver 102 is represented as a user input. The command is represented as the database-structured query (col. 2, lines 46-55, col. 2, lines 30-33);

“determining a web domain address on the network from which to extract at least a portion of the data relevant to the query, wherein the determined web domain address is provided by the database-structured query” (fig. 7, col. 10, lines 25-32; col. 2, lines 2-8);

“extracting at least the portion of the data from the web domain address directly by retrieving a non-database structured arrangement of data from the determined web domain address and performing the database-structured query upon the retrieved non-database structured arrangement of data” as (fig. 7, col. 10, lines 25-32; col. 2, lines 2-8);

“providing extracted data from the web domain address in a tab delimited file directly to the user” as returning extracted data from address in flat files indirectly to the user (col. 9, lines 49-63, col. 2, lines 25-40; col. 15, lines 65-67, fig. 6).

Madnick does not explicitly teach the claimed limitation “the client creating a database-structured query with at least one fundamental clause, based, in part, on a user input; directly to the user”.

Iizuka teaches the user interface unit receives a search request (query statement) consisting of search items and search condition as one fundamental clause (col. 13, lines 35-40).

Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply lizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing (lizuka, col. 4, lines 45-55).

As to claim 18, Madnick teaches the claimed limitation "wherein the database-structured query, further comprises, a network address within the database-structured query indicating a starting point" as (table 2, col. 12, lines 5-10).

As to claim 19, Madnick teaches the claimed limitation “a regular expression within the database-structured query used to determine the data to extract” as (col. 10, lines 2-5; col. 12, lines 5-10, table 2).

As to claim 20, Madnick teaches the claimed limitation “wherein the regular expression with the database-structured query further comprises at least one symbol used to denote the part of the regular expression that a user desires to extract” as (col. 12, lines 5-10, table 2; col. 14, lines 6-67; col. 15, lines 1-10).

As to claim 21, Madnick teaches the claimed limitation “an editor for creating a template of regular expressions used to extract the data” as (col. 12, lines 5-10, table 2).

As to claim 22, Madnick teaches the claimed limitation “at least one data extraction engine to extract the data” as (col. 15, lines 25-35).

As to claim 23, Madnick, Iizuka and Bates teaches the claimed limitation “wherein the data extraction engine is a web crawler” as (Madnick, col. 13, lines 20-35, Bates, col. 10, lines 5-20; Iizuka, figs. 2 & 9).

As to claim 24, Madnick teaches the claimed limitation “wherein the web domain address further comprises at least one link address for locating at least a portion of the data” as (col. 12; col. 15, lines 1-10).

As to claim 26, Madnick teaches the claimed limitation “wherein the web domain address further comprises a link address, wherein at least another portion of the data is located with the link address” as (col. 12; col. 15, lines 1-10).

As to claim 34, Madnick teaches the claimed limitation:

“generating a database structured query with at least one fundamental clause based, in part, on user input” as the request translator receives a data request from data receiver 102 and translates the data request into a query at the wrapper generator 614. The converter query converts a least a portion of the query into a command to interact with a semi-structured data sources such as HTML documents, flat files containing data that are not arranged as a relational database. The above information shows that a command is created based on the data request. The data request from data receiver 102 is represented as a user input. The command is represented as the database-structured query. The wrapper generator 614 is represented as a server (col. 2, lines 33-55, col. 8, lines 40-60);

“determining at least one webpage with the data, wherein the determination of the webpage is provided by the database-structured query” as extracting web pages that contains data by the commands (col. 9, lines 55-67; col. 10, lines 1-5);

“parsing the data at the at least one webpage in search of data that satisfies a query condition” as (col. 15, lines 1-10; table 2, col. 12, lines 1-20);

“wherein the data at the at least one web page is directly processed as though it is a searchable database” as the data receives 620 receives the web pages and extracts the requested data from those pages. The above information shows that each web page or website is a searchable database (col. 10, lines 1-5);

“whereby a non-database structured arrangement of data is retrieved at the least one webpage and the database-structured query is performed upon the retrieved non-database structured arrangement of data” as each command is performed upon flat files containing data that are not arranged as a relational database at the website or web page (col. 2, lines 27-32; col. 9, lines 55-67; col. 10, lines 1-5);

“extracting at least a portion of the data from the retrieved non-database structured arrangement of data that satisfies the query condition” as extracting data at a web page that satisfies the query condition (col. 15, lines 1-20);

“providing extracted data from the determined web domain address in a data log directly to the user” as returning extracted data from address in source not in data log indirectly to the user (col. 9, lines 49-63, fig. 6).

Madnick does not explicitly teach the claimed limitation “reshaping the extracted data to a predetermined format; in data log directly to the user”.

Iizuka teaches outputting the search result in a prescribed single format that is specific to each user. In particularly, converting the search result into the item presentation styles of each user according to the style conversion data (col. 5, lines 5-10; col. 5, lines 35-40).

Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 9, col. 11, lines 50-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Iizuka's teaching user interface unit receives a search request (query statement) consisting of search items and search condition and Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and further to provide an integrated retrieval scheme capable of retrieving required information from a plurality of semi-structured documents such as HTML documents that are scattering over open networks and have different document structures, presentation styles, and information elements, converting the retrieved information into a unified form for each user, and returning the information in the unified form to the user for viewing easily (Iizuka, col. 4, lines 45-55).

As to claim 37, Madnick teaches the claimed limitation "wherein the structured query is generated to parse a limited portion of the data of the at least one webpage with the limits predetermined by the user" as (col. 12, lines 1-10, table 2).

As to claim 38, Madnick teaches the claimed limitation "wherein structured query is generated to search for at least one of a text string, a table, and a predefined list of words" as (col. 2, lines 30-55).

5. Claims 4, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Hennings et al (or hereinafter "Hennings") (US 6763496).

As to claim 4, Madnick does not explicitly teach the claimed limitation "following links contained within the web domain until the links have been exhausted or following the links until a predetermined limit is reached". Hennings teaches following the links until the Caribbean.htm is reached. Caribbean.html is represented as a predetermined limit (fig. 8).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Hennings' s teaching of following the links until the Caribbean.htm is reached to Madnick's system in order to retrieve a relevant information corresponding to a user's request correctly and quickly and further provide a system and related method for adding contextual information pertaining to one or more linked documents, to display pages that contain hyperlinks to the linked documents (Henning col. 7, lines 40-45).

As to claim 35, Madnick does not explicitly teach the claimed limitation "wherein the search of data is performed on at least a second webpage". Hennings teaches at least one link: <http://www.traveltickets.com> to <http://www.traveltickets.com/cruises> for locating Caribbean data to extract (fig. 8).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Hennings' s teaching of at least one link: <http://www.traveltickets.com> to <http://www.traveltickets.com/cruises> for locating Caribbean data to extract to Madnick's system in order to retrieve a relevant information corresponding to a user's request correctly and quickly and further provide a system and related method for adding contextual information pertaining to one or more linked documents, to display pages that contain hyperlinks to the linked documents (Henning col. 7, lines 40-45).

As to claim 36, Madnick does not explicitly teach the claimed limitation "wherein parsing the data of the at least one webpage further comprises following links included on the webpage and further parsing the data of webpages determined by the links included on the webpage". Hennings teaches a first web page comprises links and parsing data as shown in figs. 1B, 4 to determine links included on the web page (fig. 8).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Hennings' s teaching of a first web page comprises links and parsing data as shown in fig. 1B to determine links included on the web page

to Madnick's system in order to response to a customer's request for more detailed information about a document on a web page and further to retrieve a relevant information corresponding to a user's request correctly and quickly and further provide a system and related method for adding contextual information pertaining to one or more linked documents, to display pages that contain hyperlinks to the linked documents. (Henning col. 7, lines 40-45).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Jammes.

As to claim 7, Madnick does not explicitly teach the claimed limitation "wherein creating the database structured query, further comprises, creating a condition expression with the database structured query describing where to start and stop to scan the data at the determined web domain address for the data to extract".

Jammes teaches as the following is one example of a name/value pair representing a query generated by the Initial_Event_Handler to extract product data related to the root level group: query =select Product_name, Product_ID From Relationships, Groups where ID_type = G and ID=1000 and relationship = Contains And (col. 22, lines 15-20). Query includes select name, product_ID from relationship, product as start point and where relationship.related_ID=Products.Product_ID (col. 29, lines 60-67; col. 30, lines 1-5).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of the following is one example of a name/value pair representing a query generated by the Initial_Event_Handler to extract product data related to the root level group: query =select Product_name, Product_ID From Relationships, Groups where ID_type = G and ID=1000 and relationship = Contains and Query includes select name, product_DI from relationship, product as start point and where relationship.related_ID=Products.Product_ID to Madnick's system in order to retrieve data in different type of data structures corresponding to a user's request.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Jammes and Christianson et al (or hereinafter "Christianson") (US 6085186).

As to claim 8, Madnick discloses the claimed limitation subject matter in claim 1, except the claimed limitation "wherein directly extracting the data from the determined web domain, further comprises: retrieving data from the determined web domain address; reducing the retrieved data to a region of interest; and searching the region of interest for the data matching a predetermined regular expression".

Jammes teaches the claimed limitation "reducing the retrieved content to a region of interest" as an HTML coded result set: web/sedans.html>Sedans </A. This

information shows the system reduced the retrieved content to a region of interest as Sedans (col. 22, lines 22-45).

Christianson teaches "searching the region of interest for the data matching a predetermined regular expression" as matching the returned html text with regular expression (col. 20, lines 65-67).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of reducing the retrieved content to a region of interest as Sedans and Christianson teaching of matching the returned html text with regular expression to Madnick's system in order to Madnick's system in order to retrieve data in different type of data structures corresponding to a user's request and to determine which sources are relevant to a given query, forwarding the query to the most relevant information sources, and further to provide regular expression component for creating modular hierarchical descriptions of regular expressions, for binding variables to the correct sub-strings recognized during pattern match to a response of an information source, for performing arbitrary action language statements with multiple variable bindings.

As to claim 9, Madnick discloses the claimed limitation subject matter in claim 1, except the claimed limitation "wherein directly extracting the data from the web domain, further comprises, storing the data matching the predetermined regular expression". Jammes teaches retrieving data records whose status fields match a predetermined

status value and that a corresponding result set would be generated. This information shows that the system stores matched records (col. 26, lines 25-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of retrieving data records whose status fields match a predetermined status value and that a corresponding result set would be generated to Madnick's system in order to backup a system when the system is corrupted.

8. Claims 11-13, 15, 27-28, 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Bates et al (or hereinafter "Bates") (US 6873982).

As to claim 11, Madnick teaches a computer-readable medium having computer-executable instructions for extracting data from a network (a memory having one or more commands to issue to the web page in order to retrieve the data from a network, col. 3, lines 21-26), "the computer-executable instruction enabling actions" (commands are enable for accessing the data and retrieving the data. Accessing and retrieving are represented as actions (col. 3, lines 20-26) comprises:

creating a database-structured query with at least one fundamental clause including a web domain address used for locating data, based, in part, on a user input" as the request translator receives a data request from data receiver 102 and translates the data request into a query. The converter query converts a least a portion of the

query into a command to interact with a semi-structured data sources such as HTML documents, flat files containing data that are not arranged as a relational database. The above information shows that a command is created based on the data request. The data request from data receiver 102 is represented as a user input. The command is represented as the database-structured query (fig. 7; col. 2, lines 30-55; col. 8, lines 40-60);

“locating data based on the web domain address provided by the database-structured query” as the descriptor file 702 may be a directory of URL addresses which locate necessary information about the data source 104. The above information shows that the data source is located based on the URL addresses. The URL address is represented as the web domain address (col. 10, lines 27-30),

“extracting at least a portion of the located data directly by retrieving a non database structured arrangement of data from the located data and performing the database-structured query upon the retrieved non-database structured arrangement of data” as at least a portion of the query is converted into one or more commands which can be used to interact with a semi-structured data source. Those commands are issued and data is extracted from the data source. In this case a source is located at an address or URL. The above information shows that the data is extracted from a semi-structured data source based on the address of the source and the command (fig. 7, col. 10, lines 25-32; col. 2, lines 2-8);

"providing extracted data from the web domain address in a tab delimited file directly to the user" as returning extracted data from address in flat files indirectly to the user (col. 9, lines 49-63, col. 2, lines 25-40; col. 15, lines 65-67, fig. 6).

Madnick does not explicitly teach the claimed limitation "directly to the user".

Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 10, col. 11, lines 60-67; col. 12, lines 1-27).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and manage.

As to claim 12, Madnick teaches the claimed limitation "wherein the database-structured query, further comprises, a network address included within the database-structured query indicating a starting point to start to crawl the network" (col. 15, lines 55-67).

As to claim 15, "wherein the database-structured query, further comprises, a regular expression within the database-structured query used to determine the data to

extract” as a regular expression with the file 706 as the database-structured query (col. 12, table 2).

As to claim 27, Madnick teaches the claimed limitations:

“creating a database-structured query with at least one fundamental clause at the server based, in part, on a user input” as the request translator receives a data request from data receiver 102 and translates the data request into a query at the wrapper generator 614. The converter query converts a least a portion of the query into a command to interact with a semi-structured data sources such as HTML documents, flat files containing data that are not arranged as a relational database. The above information shows that a command is created based on the data request. The data request from data receiver 102 is represented as a user input. The command is represented as the database-structured query. The wrapper generator 614 is represented as a server (fig. 7, col. 2, lines 30-55; col. 8, lines 40-60);

“determining a website to search based in part on the database-structured query” as determining a URL on the network to extract the data implies determines a website (table 2, col. 12, lines 1-10, lines 1-5);

“extracting at least a portion of the data relevant to the database-structured query at the website directly based on the database-structured query” as extracting the requested web pages to the wrapper generator 614 in response to the transmitted commands (col. 9, lines 55-67; col. 10, lines 1-5);

“wherein the website is processed as a searchable database” as the data receives 620 receives the web pages and extracts the requested data from those pages. The above information shows that each web page or website is a searchable database (col. 10, lines 1-5);

“whereby a non-database arrangement of data is retrieved from the website and the database-structured query is performed upon at least the retrieved non-database arrangement of the data ” as each command is performed upon flat files containing data that are not arranged as a relational database at the website or web page (col. 2, lines 27-32; col. 9, lines 55-67; col. 10, lines 1-5).

“to extract at least the portion of the data from the retrieved non-database arrangement of the data” as extracting the data from the HTML documents that the non-database arrangement of the data (col. 2, lines 27-32; col. 10, lines 1-5).

“providing extracted data from the website in a data log directly to the user” as returning extracted data from address in source not in data log indirectly to the user (col. 9, lines 49-63, fig. 6).

Madnick does not explicitly teach the claimed limitation “in data log directly to the user”.

Bates teaches storing extracted documents as results in result cache and returning a first document as a first result from the result cache directly to a user (fig. 10, col. 11, lines 60-67; col. 12, lines 1-27).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Bates teaches storing extracted documents as results

in result cache and returning a first document as a first result from the result cache directly to a user to Madnick's system in order to provide a result to a user quickly after retrieving data from a plurality of semi-structured document via open network without need a lot of time and labor to design and manage.

As to claim 28, Madnick teaches the claimed limitation "parsing the database-structure query to determine at least one link to search at the website" as (col. 15, lines 25-30; col. 9, lines 57-67).

As to claim 30, Madnick teaches the claimed limitation "determining what data to extract based in part on the database-structured query and the provided web domain address" as (col. 12, lines 1-20, table 2).

As to claim 31, Madnick teaches the claimed limitation "wherein extracting data based in part on at least one of an Hypertext Markup Language (HTML) table, a binary file, and a matching pattern" as a matching pattern (col. 15, lines 1-10).

As to claim 32, Madnick teaches the claimed limitation "reshaping the extracted data for at least one of a database, a spreadsheet, Extensible Markup Language (XML) display, and a statistical tool" as (col. 3, lines 1-8).

As to claim 33, Madnick teaches the claimed limitation "wherein the website is a starting website based in part on the database-structured query" as (col. 10, lines 1-5).

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Bates and further in view of Gupta et al (or hereinafter "Gupta") (US 20020062222) .

As to claim 13, Madnick does not teach "wherein the network address, further comprises at least one universal resource locator (URL) string generated by a sequence or list function".

Schneider teaches generating a URL by using a function (paragraph 0067)

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Gupta's teaching to Madnick's system in order to allow a user search request to be processed as a literal string, network address, or both for retrieving semi-structured data sources via Internet.

10. Claims 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Bates and further in view of Hennings et al (or hereinafter "Hennings") (US 6763496).

As to claim 14, Madnick does not explicitly teach the claimed limitation

"at least one link to another web domain address for locating data to extract".

Hennings teaches at least one link:<http://www.traveltickets.com> to
<http://www.traveltickets.com/cruises> for locating Caribbean data to extract (fig. 8).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Hennings' s teaching of at least one link:<http://www.traveltickets.com> to <http://www.traveltickets.com/cruises> for locating Caribbean data to extract to Madnick's system in order to response to a customer's request for more detailed information about a document on a web page.

As to claim 29, Madnick teaches the claimed limitation "determining at least one other website to search based in part on the database-structured query and a provided web domain address" as (col. 9, lines 55-67; col. 10, lines 1-5).

Madnick does not explicitly teach the claimed limitation "extracting at least another portion of the data at the at least one other website based on the database-structured query and the provided web domain address, wherein the at least one other website include a non-database structured arrangement of data that is processed as a searchable database".

Madnick teaches extracting data many web sites based on query and web domain address and flat files contain non-database structured arrangement of data that processed as a searchable database.

Henning teaches extracting another portion of data as shown in fig. 8.
Hennings teaches extracting Golfing data at a second web page. This web page includes a HTML document as a non-database structured arrangement of data (fig. 8).

It would have been obvious to a person of an ordinary in the art at the time the invention was made to apply Hennings's teaching of extracting Golfing data at a second web page to Madnick's system in order to retrieve data contained in a plurality of semi-structured documents over a network.

11. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick, et al (or hereinafter "Madnick") (US 5913214) in view of Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Jammes.

As to claim 16, "wherein the regular expression within the database-structured query, further defines where a scan would stop".

Jammes teaches as the following is one example of a name/value pair representing a query generated by the Initial_Event_Handler to extract product data related to the root level group: query =select Product_name, Product_ID From Relationships, Groups where ID_type = G and ID=1000 and relationship = Contains And (col. 22, lines 15-20). Query includes select name, product_DI from relationship, product as start point and where relationship.related_ID=Products.Product_ID (col. 29, lines 60-67; col. 30, lines 1-5).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of the following is one example of a name/value pair representing a query generated by the Initial_Event_Handler to extract product data related to the root level group: query =select Product_name, Product_ID From Relationships, Groups where ID_type = G and ID=1000 and relationship =

Contains and Query includes select name, product_DI from relationship, product as start point and where relationship.related_ID=Products.Product_ID to Madnick's system in order to retrieve data in different type of data structures corresponding to a user's request.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Bates and further in view of Nehab et al (or hereinafter "Nehab") (US 6029182).

As to claim 25, Madnick does not explicitly teach the claimed limitation "at least one link address that is followed to locate data to extract until a user-specified number of links is reached".

Nehab teaches a number of links traversed in the Web site can be limited to a predefined number of links based on the user-defined Web site commands (col. 25, lines 60-67; col. 26, lines 40-45).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Nehab's teaching to Madnick's system in order to reduce the elapsed user time for traversing the database and further allow the user to control the tradeoff between complexity and the number of intermediate links to the relevant documents.

13. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view of Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Jammes and Christianson et al (or hereinafter "Christianson") (US 6085186) and Fleskes (US 6529910).

As to claim 42, Madnick does not explicitly teach the claimed limitation "providing authentication data to the web domain".

Fleskes teaches providing authentication data to a domain (col. 2, lines 1-10).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fleskes's teaching of providing authentication data to a domain to Madnick's system in order to restrict access for modify web page without permission and provide a user sufficient security access rights.

14. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Rheaume (US 6247018).

As to claim 41, Madnick does not explicitly teach the claimed limitation "wherein the at least one fundamental clause includes a request to parse an HTML table, and wherein extracting the data further comprise extracting data from HTML table".

Rheaume teaches parsing an HTML table and extracting the data from HTML table (col. 11, lines 10-15, figs. 8A-8B).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Rheaume's teaching of parsing an HTML table and extracting the data from HTML table to Madnick's system in order to help a user to search/retrieve/store a portion of a document easily and quickly in large database and further retrieve a HTML page or a group of related HTML pages in an HTML frameset from a user specified URL or from a disk file.

15. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view Iizuka et al (or hereinafter "Iizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Eckes (US 6243832).

As to claim 43, Madnick does not explicitly teach the claimed limitation "wherein the extracted data includes at least one binary file".

Eckes teaches loading binary file (col. 2, lines 40-45).

It would have been obvious to a person of an ordinary skill in the art at the time invention was made to apply Eckes's teaching of downloading binary file to Madnick's system in order to allow faster retrievals and reduced resource consumption requirements.

16. Claims 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madnick et al (or hereinafter "Madnick") (US 5913214) in view Iizuka et al (or hereinafter

"lizuka") (US 6424980) and Bates et al (or hereinafter "Bates") (US 6873982) and further in view of Jammes.

As to claim 41, Madnick does not explicitly teach the claimed limitation "wherein the at least one fundamental clause includes a request to parse an HTML table, and wherein extracting the data further comprise extracting data from HTML table".

Jammes teaches parsing HTML file and extracting data from HTML file (fig. 18). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of parsing HTML file and extracting data from HTML file to Madnick's system in order to help a user to search/retrieve/store a portion of a document easily and quickly in large database and further retrieve a HTML page or a group of related HTML pages in an HTML frameset from a user specified URL or from a disk file.

As to claim 44, Madnick teaches the claimed limitation "wherein the server computer is further configured to perform the actions including: providing a stored database-structure query to the client computer system upon user input request" as (col. 2, lines 33-55, col. 8, lines 40-60).

Madnick does not explicitly teach "storing the database-structured query".

Jammes teaches storing SQL queries in HTML template file (col. 9, lines 10-20). It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Jammes's teaching of storing SQL queries to Madnick's

system in order to help a user to search/retrieve/store a portion of a document easily and quickly in large database.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

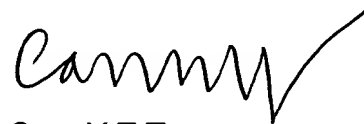
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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